Reducing Very Late Diagnosis of HIV Infection In South West England Using Serious Incident Reporting (SIR)

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Introduction and Aims

1. Late diagnosis of HIV is associated with increased hospitalisations, decreased life expectancy [1, 2] and increased treatment and care costs to the NHS [3].
2. Individuals with undiagnosed HIV are likely to be responsible for the majority of transmissions because successfully treating patients can reduce their infectivity [4].
3. Serious Incident reporting (SIR) may be useful in identifying reasons for late diagnosis across the entire patient pathway, impacting testing policies and preventing future occurrences.
4. In 2011 the South West Office for sexual health under guidance from the South West Sexual Health Board established a pilot study to very late diagnosis of HIV as serious incidents.
5. NHS Bournemouth and Poole, and NHS Bristol were invited to pilot a review of all cases of very late diagnosis of HIV in line with the national framework for reporting and learning from serious adverse incidents.
6. Aims
   - The aims of the study were:
     1. to pilot the use of Serious Incident Reporting (SIR) to enable root-cause analysis (RCA) of very late HIV diagnosis in primary and secondary care settings.
     2. to formulate and implement an action plan based on the causes identified.
     3. to review whether the SIR process was an effective catalyst for improving access to testing and preventing very late HIV diagnosis.
   - Fundamentally, we aimed to understand the effect of SIR across the health community as a public health intervention.

Methods

1. We developed a:
   1) RCA tool to determine whether patients had previously presented with risk factors or clinical indicators for HIV
   2) protocol and case review template for hospital and primary care data collection
   3) project reported all cases of very late diagnosis of HIV as serious incidents in 6 month batch.
   4) the batched late diagnoses were submitted via the Strategic Executive Information System (SEIS).

Audit 1 – January to June 2011 in Bristol. June to December 2011 in Bournemouth and Poole submitted in February 2012

Audit 2 – January to June 2012 in both sites submitted in September 2012

The SIR process triggered consideration of late diagnoses by Director of Public Health and a RCA of each case.

For each case demographic characteristics, HIV indicator conditions (www.bhiva.org/documents/guidelines/online) CD4 count, risk factors and prior visits to a GP or hospital were recorded from medical records (after gaining patient consent).

Data were compiled, analysed, reviewed and an action plan formulated.

Results

Table 1: Summary of findings from audits 1 and 2 in Bournemouth and Poole and Bristol

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<thead>
<tr>
<th>Primary care</th>
<th>Secondary care</th>
<th>Community</th>
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<tbody>
<tr>
<td>Action as a result of the audit in Bournemouth and Poole</td>
<td>Action as a result of the audit in Bristol</td>
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<tr>
<td>Primary care</td>
<td>Secondary care</td>
<td>Community</td>
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<tr>
<td>Action programme to increase awareness of clinical indicators (CIs) in GP settings. Development HIV practice website</td>
<td>Attendance on HIV education day</td>
<td>Community testing programme targeting very high risk groups for education events and testing was established. A tendering process is underway to develop more integrated sexual health services and develop outreach GUM clinics in high prevalence areas.</td>
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<td>Practices encouraged to offer HIV testing at the point of registration to individuals from high prevalence countries</td>
<td>Attendance on HIV education day</td>
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<td>Evidence of patient refusing test in</td>
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Discussion and Conclusions

1. SIR provides an opportunity to systematically review cases, and is a process that should relate to the entire patient pathway and involve the whole health community.
2. We identified many missed opportunities for earlier HIV diagnosis in primary care and therefore increasing HIV testing in primary care should be a commissioning priority.
3. Health professionals in primary and secondary care require ongoing education & training on risk factors and recognising HIV ICs for HIV acquisition.
4. SIR and RCA should be recommended as valuable tools for achieving earlier diagnosis of HIV.

References

2. May M et al. Impact of late diagnosis and treatment on life expectancy in people with HIV-1. UK CCMC Study British Medical Journal 2011; 343
4. Rodgers A et al. HIV transmission risk through condomless sex if HIV-positive partner on suppressive ART/PARTNERS study (CROI abstract 153LB)
8. Howland C and Majewski W. Training resource designed to increase frequency of HIV testing in non-GUM settings displays promising outcomes. HIV Medicine. 2013;14:50

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